



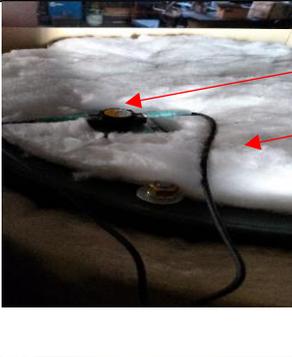
# LMF MANUFACTURING LTD

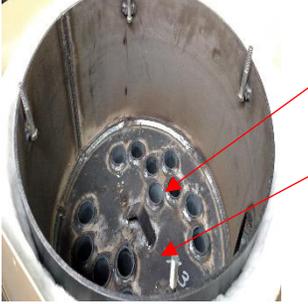
## Boiler Cleaning Procedure

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Models: AHB-100 and AHB-170

4/9/2016

<p>1. Make sure the fire in the burn pot is completely extinguished.</p>		
<p>2. After confirming the fire is out and the unit is cool to the touch. Place a cover over the burn pot opening so the ashes don't fall into the pot.</p>		<p>Heat Shield Cover over burn pot opening</p>
<p>3. Remove the heat shield from above the burn pot. If you do not remove the heat shield, the ash will fall onto the heat shield and not be removed from the unit. <b>Close the fire chamber door during cleaning to reduce ash exiting the unit.</b></p>		<p>Heat Shield removed – Heat Exchanger tubes will be viewable</p>
<p>4. Remove the 4 sheet metal screws from the boilers top cover. There is 1 screw on each side. A 5/16" socket, wrench, or nut driver will be required to back the screws out. After the screws are removed, lift the sheet metal top off the unit.</p>		<p>5/16" head sheet metal screws</p>
<p>5. After the sheet metal cover has been removed, the insulation and low limit switch will be visible. Remove the 2 black wires from the low limit switch, then lift the white insulation pad off the top of the boiler. The wires can be reconnected on either side during reassembly.</p>		<p>110F Low Limit Switch Insulation Pad</p>
<p>6. With the insulation pad removed, the four 3/8" studs will be visible. Using a 9/16" wrench or socket, remove the 4 brass nuts and washers that hold the lid in place. <b>Removing this cover will not allow access to the water jacket or water vessels.</b></p>		<p>3/8" studs with brass nuts and washers – 4 total</p>

<p>7. With the 9/16" brass nuts removed from the studs, the steel top can be lifted off to access the top of the boiler vessel and heat exchanger tubes.</p>	 <p>4 Nuts and washers removed from studs.</p>
<p>8. When the boiler top is removed you will see the heat exchanger tubes. Remove all ash from inside this area. Use a metal scooper or an approved ash vacuum to remove the ashes from this area and discard them safely and properly</p>	 <p>Exposed heat exchanger tubes. Example of a properly cleaned exhaust area.</p>
<p>9. Using the brush supplied with the boiler. Insert the brush, bristle end first, into each heat exchanger tube. Use an up and down motion to clear each tube of ash. Dislodged ash will fall below to the cover you placed on the burn pot.</p>	 <p>Boiler cleaning brush inserted into heat exchanger tubes</p>
<p>10. Remove the flu pipe that is attached to your boiler. Clean all ash from the boilers flu exhaust exit. <b><u>Recommended: Clean the boilers entire exhaust system when cleaning the boiler.</u></b></p>	 <p>Example: Properly cleaned boiler exhaust flu.</p>
<p>11. Remove all ash from the cover you placed on the burn pot, then remove ash from ash pan collection area. Cleaning ash from your unit is now complete Reassemble the boiler in the opposite manner it was unassembled</p> <p>12. Before Reassembling: Check the underside of the lid and wipe off any deposits and be sure the rope gasket is in good condition. Replace gasket if needed.</p>	 <p>Underside of boiler top. Rope Gasket visible in this position</p> <p>Replace with 3/4" diameter UL approved fiberglass rope gasket and use UL approved gasket cement to apply the gasket if needed.</p>

